

ABSTRACT

A nonaqueous secondary battery having a compound of any of the general formulae (1) to (3)



where A is Cu, Ag or Au; $0.4 \leq a \leq 5$; B and D are different from each other, and are each selected from the group consisting of Cu, Ag, Au, Zn, Al, W and Li; $0.001 \leq b \leq 0.999$; $0 < y < 2$; E, G and J are different from each other, and are each selected from the group consisting of Cu, Ag, Au, Zn, Al, W, Li and Mg; M is Ca, Sr, Na, K, Rb, O, F, Cl, Br or I; $0.001 < e < 0.999$; $0.001 < g < 0.999$; $0 \leq m \leq 0.2$; and $0 < z < 2(1+m)$,

as an active material of a negative electrode is disclosed. This secondary battery features a high voltage and a high energy density, and forms few dendrites of lithium when the battery is repeatedly charged and discharged.